Appendix 1. Continued.

Genus	General distribution	Habit	Chromosome number
Gynoxoid			
Paragynoxys (Cuatrec.) Cuatrec.	N Andes	shrubs, trees	n = ca. 40
Gynoxys Cass.	N Andes	shrubs	n = 40, ca. 40
Chersodoma			
Chersodoma Phil.	S South America	perennial herbs, subshrubs	n = 10
Senecioninae, numbered groups discussed in text.			
(1) Some generic groups with n = 30 or 50, some with penicillate styles.			
Jessea H. Rob. & Cuatr.	Central America	perennial herbs	n = ca. 50
Robinsonia DC.	Juan Fernandez	weak shrubs	n = 20
Lordhowea B. Nord.	SW Pacific	shrubs	n = 19
Arrhenechthites Mattf.	New Guinea	shrubs	n = ca. 50
Dendrosenecio (Hauman ex Hedb.) B. Nord.	Central Africa	rosette-trees	n = 50
Pericallis D. Don	Macaronesia	perennial herbs	n = 30
Graphistylis B. Nord.	Brazil	perennial herbs	n = 50
Iocenes B. Nord.	Argentina, Chile	perennial herbs	n = 20
Cineraria L.	E & S Africa, Arabia	herbs	n = 10
(2, 3) *Senecio* including aureoid group and *Mulgedifolii.*			
Senecio L. (incl. *Packera* A. Löve & D. Löve)	America, Eurasia, Africa, Australia	annual & perennial herbs	n = 10, 18, 19, 20, 22, 23, 30, 40, 46, 50, etc.
(4) *Emilia,* n = 5.			
Emilia (Cass.) Cass.	paleotropics, wide adventive	annual herbs	n = 5, 8, 10, 15
(5) Genus discussed with *Senecio* under Senecioninae with n = 10, 20.			
Pseudogynoxys (Greenm.) Cabrera	tropical America	vines	n = 45, ca. 46
(6) Andean genera *Lasiocephalus* and *Pentacalia,* n = 20, 30, 45–52.			
Lasiocephalus Schltdl.	N Andes	spreading subshrubs	n = 20
Pentacalia Cass. (incl. *Scorbicaria* Cass. & *Monticalia* C. Jeffrey)	Central America, West Indies, South America	shrubs & vines	n = 20, ca. 40, 45–50, 50
Odontocline B. Nord.	West Indies	scandent shrubs	n = 30
(7) *Culcitium* and *Dorobaea,* n = 20, 50.			
Culcitium Humb. & Bonpl.	Andes	perennial herbs	n = 20
Dorobaea Cass.	Andes	perennial herbs	n = ca. 50
(8) *Werneria* and segregates, n = ca. 50, 100.			
Werneria HBK	Andes	perennial herbs	n = ca. 48, 50, 52, ca. 75, ca. 77, ca. 103, ca. 106
Misbrookea V. A. Funk	Andes	perennial herbs	n = ca. 53
Xenophyllum V. A. Funk	Andes	perennial herbs	n = ca. 50, 54
Other Senecioninae not discussed in text, giving Jeffrey (1992) subgroups.			
(Senecionoid)			
Hasteola Raf. (incl. *Synosma* Raf. ex Britton & A. Br.)	E U.S.	perennial herbs	n = 18, 20
Erechtites Raf.	North & South America	perennial herbs	n = 20
Crassocephalum Moench	tropical Africa, Asia, adventitious	perennial herbs	n = 10, 20

Appendix 1. Continued.

Genus	General distribution	Habit	Chromosome number
(Synotoid)			
Faujasiopsis C. Jeffrey	Mauritius	shrubs	$n = 10$
Synotis (C.B.Cl.) C. Jeffrey & Y. L. Chen	E Asia	subshrubs	$n = 10, 18, 20$
Delairea Lem.	South Africa	scandent	$n = 10$
(Gynuroid)			
Solanecio (Sch. Bip.) Walp.	tropical Africa	herbs, weak shrubs	$n =$ ca. 90
Kleinia Mill.	Macaronesia, Africa, S Asia	fleshy herbs, shrubs	$n = 9, 10$
Gynura Cass.	paleotropics	scandent herbs	$n = 10$
(Othonnoid)			
Steirodiscus Less.	South Africa	annual herbs	$n = 8, 10$
Othonna L.	South Africa, SW Asia, Australia	succulent perennial herbs, subshrubs	$n = 10, 20$
Gymnodiscus Less.	South Africa	annual herbs	$n = 9$
Euryops (Cass.) Cass.	tropical & South Africa, Arabia	annual & perennial herbs, subshrubs	$n = 10, 20$
Adenostylinae (quadridentate group)			
Iranecio B. Nord.	SW Asia	rhizomatous herbs	$n = 12, 20$
Dolichorrhiza (Pojack.) Galushko	Caucasus, Iran	rhizomatous herbs	$n = 15$–$16, 20, 22$
Pojarkovia Askerova	Caucasus	rhizomatous herbs	$n = 20$
Cacalia L.	Europe	rhizomatous herbs	$n = 19$
Caucasalia B. Nord.	Caucasus	rhizomatous herbs	$n = 19$

BOOK REVIEW

Mori, S. A., G. Cremers, C. Gracie, J.-J. de Granville, M. Hoff & J. D. Mitchell. 1997. Guide to the Vascular Plants of Central French Guiana. Part 1. Pteridophytes, Gymnosperms, and Monocotyledons. Hardcover. ISBN 0-89327-398-8. Memoirs of the New York Botanical Garden 76(1): 1–422. Retail price: $50 U.S.

In a time when many country-wide or regional floras are under way in tropical America, yet few are close to completion, it is refreshing to see that a new round of smaller neotropical floras is being completed. The *Guide to the Vascular Plants of Central French Guiana* follows the recently published *Flora of St. John* by Pedro Acevedo and will soon be succeeded by a florula of several biological reserves around Iquitos, Peru, by Rodolfo Vásquez and a florula of Amacayacu National Park in Amazonian Colombia by Agustín Rudas. Within the next year or two we should also be regaled by an illustrated field guide and a separate flora of the Reserva Ducke outside Manaus, Brazil. Each of these floras covers between 1000 and 3000 taxa and will provide a solid baseline of plant data that will facilitate more in-depth studies at these sites in the future.

This first of two volumes of the Central French Guiana flora covers the pteridophytes (194 spp.), gymnosperms (1 sp.), and monocotyledons (426 spp.), as well as a brief introduction, an extensive "Aids to Identification" section, a key to the major groups of plants, and a glossary of botanical terms at the end. Informative and easy-to-use keys are also provided for the families of monocotyledons and pteridophytes. Volume 2, which is due out in late 1998, will cover the estimated 1435 species of dicotyledons in the study area, for a total of just over 2150 species of vascular plants in the whole flora. The area covered by this flora is 1400 km^2, although the level of knowledge and collecting is clearly concentrated on the immediate surroundings of the village of Saül. I was at first confused when looking at the map of the flora area (fig. 2), because the scale indicates a much larger area. To correlate with the given coordinates and the stated size of the flora area, the scale bar should read "7 km" instead of "20 km."

The beauty of this book is that it is so lavishly illustrated. There are 240 excellent color photographs by Carol Gracie of plant species and their distinguishing characters, interspersed in small fascicles throughout the text. There are also 165 line drawings, most of them illustrating individual species, but 8 of these (figs. 4–11) are exquisite full-page composite drawings by Bobbi Angell that show features such as different fruit types, leaf glands, and adaptations for climbing. Two more full-page figures in the glossary pack in a multitude of useful characters as well.

I have just a few quibbles with the style and layout of the volume. The size of the type is too small, at least where there are pages of uninterrupted text. I would like to see more precise or informative headers used, for example, family names rather than the few high level groups used on recto pages or the same journal name repeated throughout on the verso pages. The "Aids to Identification" section provides a myriad of valuable field characters, but the lists go on for a full 36 pages, and a single list such as "Trees, shrubs, and lianas with glands on the leaves" covers 2½ pages with 57 bulleted entries. There are clearly three very different styles of illustrations combined in the volume. Bobbi Angell's drawings of the monocots (except palms) are typically elegant and delicate. The palms, however, are excessively dark and too highly contrasted. Last, the pteridophyte figures use dashed lines to separate different species on the same page and then label them with overly bold-faced, Leroy-drawn species names. The photographic inserts are treated as "plates" to distinguish them from the black-and-white "figures," but then they are numbered with Roman numerals, which presents a minor challenge when the text refers the reader to "Plate LXXII." Toward the end of the volume there is a nine-page "Index to species illustrated in Part 1," but since the general index already does a fine job of referencing all the figures and plates, I would recommend not repeating this kind of index in the next volume.

The taxonomic treatments were prepared mostly by specialists in the particular families, and the careful degree of editing is apparent throughout. Specialized families such as the orchids, grasses, and sedges have separate figures that effectively illustrate the main descriptive characters used in the treatments. The scope of the descriptions, whether family, genus, or species, is not universal but rather is restricted to the flora area itself. Consequently, the claim that the flora will help identify families and genera from other lowland areas in northern South America will not always hold up.

Still, botanists from as far away as Manaus have found a great deal of overlap with this area and their own local flora. One helpful addition would be to include some information about each species' overall distribution, for instance, if it is a narrow endemic or a widespread American weed.

Altogether, this volume ranks right at the top of its class. It follows the tradition of extremely informative local floras like Tom Croat's *Flora of Barro Colorado Island* and then provides the kind of visual aids that will entice even casual aficionados to explore the flora of lowland South America, be it vicariously, browsing through this book, or by getting their feet dirty and visiting a now well-documented site such as the region surrounding the French Guiana village of Saül.—Paul E. Berry, *Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166, U.S.A.*

NOTICE

The 1997 Jesse M. Greenman Award

The 1997 Jesse M. Greenman Award has been won by Elena Conti for the publication "Circumscription of Myrtales and their relationships to other rosids: Evidence from *rbc*L sequence data," coauthored by E. Conti, A. Litt, and K. J. Sytsma, and published in American Journal of Botany 83(2): 221–233 (1996). This study is based on a Ph.D. dissertation from the University of Wisconsin under the direction of Dr. Kenneth J. Sytsma.

The Greenman Award, a certificate and a cash prize of $1000, is presented each year by the Missouri Botanical Garden. It recognizes the paper judged best in vascular plant or bryophyte systematics based on a doctoral dissertation published during the previous year. Papers published during 1997 are now being accepted for the 30th annual award, which will be presented in the summer of 1998. Reprints of such papers should be sent to Dr. P. Mick Richardson, Greenman Award Committee, Missouri Botanical Garden, P. O. Box 299, St. Louis, Missouri 63166-0299, U.S.A. In order to be considered for the 1997 award, reprints must be received by 1 June 1998.

ANNALS OF THE MISSOURI BOTANICAL GARDEN: CHECKLIST FOR AUTHORS

1. General Instructions

- ☐ Text is in English or Spanish on numbered pages.
- ☐ Manuscript is typed on one side of nonglossy 8½ × 11 in. paper.
- ☐ At least 1 in. is left as margin all around, except on the first page, which has 3 in. left blank at the top.
- ☐ Three copies of double- or triple-spaced printed manuscript, including abstract, legends, tables, specimen lists, Literature Cited, and footnotes, are enclosed.
- ☐ Manuscript is also submitted on MS-DOS/WINDOWS 3½ in. diskette, as WordPerfect® [preferable] file.
- ☐ Right-hand margin is not justified, and words are not broken there.
- ☐ Special typefaces are not used. Common Latin words or phrases are not italicized (e.g., et al., i.e., sensu, etc.).
- ☐ Only names at the rank of genus and below are italicized.
- ☐ Correct accents, umlauts, and other diacritical marks have been included.
- ☐ All figures and tables are cited in the text and are numbered in the order in which they are to appear.
- ☐ Photocopies of the figures are included with each copy of the manuscript.

2. Style

- ☐ Recent issue of the *Annals* is used as a model.
- ☐ *Chicago Manual of Style*, latest edition, is used as a reference.

3. First Page

- ☐ Footnotes are typed as double-spaced paragraphs on the first page. The first footnote contains acknowledgments, including information on granting agencies, herbaria that loaned specimens, and the name of the artist. The second footnote is the author's address. Addresses for additional authors are each separate footnotes. No other footnotes occur, except in tables, where unavoidable.

4. Abstract

- ☐ A one-paragraph abstract precedes text. Papers in Spanish have an English abstract in addition to a Spanish resumen.
- ☐ The abstract is concise (1 paragraph) and includes brief statements about the paper's intent, materials and methods, results, and significance of findings.

5. Tables

- ☐ Tables are neat, double-spaced, and easily understood rather than long and complex.
- ☐ Tables do not contain vertical or horizontal lines. [Editor and/or printer will add them as needed.]
- ☐ Captions are typed double-spaced as paragraphs at the tops of the tables.
- ☐ Each table starts on a separate sheet and is double-spaced.

6. Abbreviations

- ☐ Periods are used after all abbreviations (which are minimized) except metric measures, compass directions, and herbarium designations.
- ☐ When dates are given as part of collection information, three-letter month abbreviations are used, except for months with four letters, which are spelled out in full.
- ☐ States are not abbreviated, and cities are spelled out. [St., as in St. Louis, is acceptable.]
- ☐ Periodicals are abbreviated according to *B-P-H* (*Botanico-Periodicum-Huntianum*) and to *B-P-H/S* (*Botanico-Periodicum-Huntianum/Supplementum*).
- ☐ Authors' names are abbreviated according to Brummit & Powell's *Authors of Plant Names.*
- ☐ Book titles are abbreviated according to *Taxonomic Literature*, edition 2, but with initial letters capitalized. Book titles are spelled out in the Literature Cited.
- ☐ Herbaria are abbreviated according to *Index Herbariorum*, edition 8.

7. Taxonomic Treatment

- ☐ Species entries are organized as follows: Heading, vernacular name(s), Latin diagnosis (if necessary), description, distribution, summary, specimens examined, discussion. The discussions are parallel and follow the same order, e.g., diagnostic characteristics, distinction from similar species variation, distribution and ecology, nomenclature and typification, uses.
- ☐ One paragraph per basionym is used as follows: *Taxon* author, literature citation, type citation, e.g., *Pleurothyrium amplifolium* (Mez) Rohwer, Mitt. Inst. Allg. Bot. Hamburg 20: 43. 1986. *Nectandra amplifolia* Mez, Arbeiten Königl. Bot. Gart. Breslau 1: 131. 1892. TYPE: Brazil. Rio de Janeiro: Alto Macahé, *Glaziou 17731* (holotype, B; isotypes, B, G, K, NY, P).
- ☐ Lectotype designations are included together with an indication of where they were designated, the year, and the author. This reference is listed in the Literature Cited. If the author of the paper submitted is making the lectotypification, the phrase "here designated" is used.
- ☐ Exclamation points are used for specimens examined, and types not seen are indicated as such (e.g., MO!, US not seen).
- ☐ A brief Latin diagnosis for each new taxon is provided rather than a complete Latin description.
- ☐ For species with infraspecific taxa: Description and discussion are composite (incorporating all infraspecific taxa) and parallel with other species descriptions. Descriptions of infraspecific taxa are parallel with one another (in the same species). All synonyms are listed under the appropriate infraspecific taxon.
- ☐ Descriptions: Descriptions are parallel, within a given rank. All measurements are metric. Hyphens are used for parenthetical extremes: "peduncle (8.2–)14.3–28.0(–31.9) cm long," unless intermediate values are

not expected: ovary with (2)4(6) locules. Length × width are given in the following manner: lamina 36.4–82.8 × 9.1–16.8 cm.

☐ When relevant, nomina nuda, misapplied names and excluded names are included in the discussion following the description, or at the end of the paper, but are not part of the formal synonymy.

8. Specimens Examined

☐ If many specimens were examined, those cited in the text are limited to ca. 1½ manuscript pages.

☐ An index to specimens examined is placed at the end of the paper, following the Literature Cited. It is arranged alphabetically by collector, followed by collection number, followed by the number of the taxon in the text. Names (including initial(s) of first and second collector are provided, "et al." if three or more.

☐ Specimens are cited in the text as follows: *Additional specimens examined* (or *Selected specimens examined*) MEXICO. **Oaxaca:** Sierra San Pedro Nolesco, Talea, 12°37″N, 85°14′W, 950–1100 m, 3 Feb. 1987 (fl), *Jergensen 865* (BM, G, K, US). [Dates and reproductive status are optional but are omitted from longer lists.] Countries are run together in the same paragraph, e.g., COUNTRY A. **Major political division:** . . . COUNTRY B. **Major political division:** . . . . Separate paragraphs are used for major continental regions within major political divisions.

9. Vouchers and Genetic Sequences

☐ If paper presents original data, it includes the citation of herbarium vouchers, as well as vouchers for seed collections, etc. [Depending on the type of paper, reference to the original wild source may also be required.] Vouchers are also cited from common names and uses taken from specimen labels.

☐ Herbarium vouchers state the collector and number, herbarium in which the voucher is located, and a clear annotation that the material represents the voucher for the study in question.

☐ Genetic sequences have been banked, and accession numbers are provided.

☐ Author accepts responsibility for establishing the accuracy of information provided.

10. Keys

☐ Keys are clear and have been checked carefully for consistency with the descriptions. Leads of each couplet are parallel.

☐ Dichotomous keys are indented.

☐ Infraspecific taxa are keyed separately, not in species keys.

11. Literature Cited

☐ The Literature Cited contains all references cited in the text.

☐ All entries in the Literature Cited are cited in the text.

☐ Spelling of author(s) name(s) and years of publication have been double-checked.

☐ All entries have been verified against original sources, especially journal titles, accents, diacritical marks, and spelling in languages other than English.

☐ Periodicals are listed as follows: author's last name, initial(s). Year. Full title of article. Journal abbreviated as in *B-P-H/S*. Volume: pages. No parenthetical part numbers after volume numbers are given unless each part is paginated separately.

☐ For more than one author, this style is followed: author's last name, initial(s), second author's initial(s), last name & third author's initial(s), last name.

☐ Books appear as follows: author's last name, initial(s). Year. Full Unabbreviated Title (edited by Editor), 3rd ed., Vol. 2. Publisher, City of Publication.

☐ Citations of work "in prep.," unpublished theses and dissertations, and similar references to inaccessible sources have been eliminated or kept to a minimum. They are not included in the Literature Cited.

12. Illustrations

☐ Author(s) name(s) and figure number(s) are written **in pencil** on the back of each figure or plate, on both originals and review copies.

☐ Scale bars appear on illustrations, photographs, and maps.

☐ Magnifications/reductions are not indicated in captions.

☐ All illustrative materials are mounted on stiff cardboard no thicker than ¼ in.

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☐ No stripping is inserted between plate or figure segments. [Printer will insert stripping.]

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☐ Scanning electron micrographs are free of conspicuous charging.

☐ Axes on graphs are all labeled.

☐ Captions provide all explanatory text. No text appears on the figures. Captions are separate from other text, one paragraph for each group of figures, and following the style in current issues of the *Annals*.

☐ Symbols on maps are legible and reduction has been taken into consideration.

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